

## **Points of agreement**

1. The goal is to find and characterize Earth-sized planets in the habitable zones of nearby F-G-K (and some M) stars.

--If we don't shoot for this goal, we won't be competitive with large ground-based telescopes in 10-20 years, and we won't satisfy the questions of the general public

2. We should be aiming for a UV/optical telescope as the exoplanet flagship mission for the next decade.

--Bandpass works for both coronagraphs and occulter

--Good biomarkers/atmospheric spectral features

--Near-IR would be desirable

--Strong community support for UV/optical astronomy.

--Europeans (3 of them anyway) could support this proposal

3. Broad appeal to other areas of astronomy is essential.

4. The necessary size of the telescope remains TBD. 4 m is the minimum size needed to satisfy requirement 1.

--To make this decision, we need better information about  $\eta_{\text{Earth}}$  (which we should get from Kepler) and on exozodi level (for which we will get some, possibly enough, information from LBTI).

--A small (1.2-1.5m) space-based coronagraph mission could provide additional information on exozodi brightnesses.

5. A dedicated 3-5 m telescope with a new-generation spectrograph could contribute enormously to our knowledge of exoplanets from RV measurements.

6. We need to have (at a minimum) a spectrum, the actual mass, and orbital semi-major axis in order to fully characterize an exoplanet.

## **Points of possible agreement**

1. If  $\eta_{\text{Earth}}$  is low and a big telescope is needed, some TPF concepts (*e.g.* the external occulter) would benefit from having a target list ahead of time.

--The target list is *not* likely to be derivable from ground-based RV measurements.

--Space-based astrometry could, in principle, provide such a list.

## **Points on which we need to agree**

1. Do we need to make a down-select on TPF mission architecture (coronagraph or occulter, or both?) by 2015?

--Does aperture size need to be picked by this time, as well?

2. Should NASA's Exoplanet Technology money be deployed in a "bottoms-up" manner, as today, or in a "top-down" manner, following one suggestion?

3. How should we set up the TPF architecture down-select process?